

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (withdrawn) A variant Hepatitis B Virus (HBV) comprising a surface component exhibiting an altered immunological profile compared to a reference HBV.
2. (withdrawn) A variant HBV according to claim 1 wherein the surface component on the variant is a surface antigen which comprises a single or multiple amino acid substitution, addition and/or deletion or truncation compared to a surface antigen from said reference HBV and wherein an antibody generated to the reference surface antigen from the reference HBV exhibits reduced capacity for neutralizing said variant HBV.
3. (withdrawn) A variant HBV according to claim 2 wherein the surface antigen on the variant comprises an amino acid substitution, addition and/or deletion or truncation compared to the amino acid sequence set forth below:

M X<sub>1</sub> X<sub>2</sub> X<sub>3</sub> X<sub>4</sub> S G X<sub>5</sub> L X<sub>6</sub> P L X<sub>7</sub> V L Q A X<sub>8</sub> X<sub>9</sub> F X<sub>10</sub> L T X<sub>11</sub> I X<sub>12</sub> X<sub>13</sub> I P X<sub>14</sub> S L X<sub>15</sub> S W W  
T S L N F L G X<sub>16</sub> X<sub>17</sub> X<sub>18</sub> X<sub>19</sub> C X<sub>20</sub> G X<sub>21</sub> N X<sub>22</sub> Q S X<sub>23</sub> X<sub>24</sub> S X<sub>25</sub> H X<sub>26</sub> P X<sub>27</sub> X<sub>28</sub> C P P X<sub>29</sub> C  
X<sub>30</sub> G Y R W M C L X<sub>31</sub> R F I I F L X<sub>32</sub> I L L L C L I F L L V L L D X<sub>33</sub> Q G M L X<sub>34</sub> V C P L  
X<sub>35</sub> P X<sub>36</sub> X<sub>37</sub> X<sub>38</sub> T T S X<sub>39</sub> X<sub>40</sub> X<sub>41</sub> C X<sub>42</sub> T C X<sub>43</sub> X<sub>44</sub> X<sub>45</sub> X<sub>46</sub> Q G X<sub>47</sub> S X<sub>48</sub> X<sub>49</sub> P X<sub>50</sub> X<sub>51</sub> C C  
X<sub>52</sub> K P X<sub>53</sub> X<sub>54</sub> G N C T C I P I P S X<sub>55</sub> W A X<sub>56</sub> X<sub>57</sub> X<sub>58</sub> X<sub>59</sub> L W E X<sub>60</sub> X<sub>61</sub> S X<sub>62</sub> R X<sub>63</sub> S W L  
X<sub>64</sub> L L X<sub>65</sub> X<sub>66</sub> F V Q X<sub>67</sub> X<sub>68</sub> X<sub>69</sub> X<sub>70</sub> L X<sub>71</sub> P X<sub>72</sub> V W X<sub>73</sub> X<sub>74</sub> X<sub>75</sub> I W X<sub>76</sub> X<sub>77</sub> W X<sub>78</sub> W X<sub>79</sub> P  
X<sub>80</sub> X<sub>81</sub> X<sub>82</sub> X<sub>83</sub> I X<sub>84</sub> X<sub>85</sub> P F X<sub>86</sub> P L L P I F X<sub>87</sub> X<sub>88</sub> L X<sub>89</sub> X<sub>90</sub> X<sub>91</sub> I [Formula I];

wherein:

X<sub>1</sub> is E or G or D;

X<sub>2</sub> is N or S or K;

X<sub>3</sub> is I or T;  
X<sub>4</sub> is T or A;  
X<sub>5</sub> is F or L;  
X<sub>6</sub> is G or R;  
X<sub>7</sub> is L or R;  
X<sub>8</sub> is G or V;  
X<sub>9</sub> is F or C;  
X<sub>10</sub> is L or S or W;  
X<sub>11</sub> is R or K;  
X<sub>12</sub> is L or R;  
X<sub>13</sub> is T or K;  
X<sub>14</sub> is Q or K;  
X<sub>15</sub> is D or H;  
X<sub>16</sub> is G or E or A;  
X<sub>17</sub> is S or A or V or T or L;  
X<sub>18</sub> is P or T;  
X<sub>19</sub> is V or R or T or K or G;  
X<sub>20</sub> is L or P;  
X<sub>21</sub> is Q or L or K;  
X<sub>22</sub> is S or L;  
X<sub>23</sub> is P or Q;  
X<sub>24</sub> is T or I;  
X<sub>25</sub> is N or S;  
X<sub>26</sub> is S or L;

X<sub>27</sub> is T or I;  
X<sub>28</sub> is S or C;  
X<sub>29</sub> is I or T;  
X<sub>30</sub> is P or A;  
X<sub>31</sub> is R or Q;  
X<sub>32</sub> is F or C;  
X<sub>33</sub> is Y or C;  
X<sub>34</sub> is P or H or S;  
X<sub>35</sub> is I or L;  
X<sub>36</sub> is G or R;  
X<sub>37</sub> is S or T;  
X<sub>38</sub> is T or S;  
X<sub>39</sub> is T or V or A;  
X<sub>40</sub> is G or E or Q;  
X<sub>41</sub> is P or A or S;  
X<sub>42</sub> is K or R;  
X<sub>43</sub> is T or M;  
X<sub>44</sub> is T or I or S or A;  
X<sub>45</sub> is P or T or A or I or L;  
X<sub>46</sub> is A or V;  
X<sub>47</sub> is N or T;  
X<sub>48</sub> is M or K or L;  
X<sub>49</sub> is F or Y or I;  
X<sub>50</sub> is S or Y;

X<sub>51</sub> is C or S;  
X<sub>52</sub> is T or I or S;  
X<sub>53</sub> is T or S;  
X<sub>54</sub> is D or A;  
X<sub>55</sub> is S or T;  
X<sub>56</sub> is F or L;  
X<sub>57</sub> is A or G or V;  
X<sub>58</sub> is K or R or T;  
X<sub>59</sub> is Y or F;  
X<sub>60</sub> is W or G;  
X<sub>61</sub> is A or G;  
X<sub>62</sub> is V or A;  
X<sub>63</sub> is F or L;  
X<sub>64</sub> is S or N;  
X<sub>65</sub> is V or A;  
X<sub>66</sub> is P or Q;  
X<sub>67</sub> is W or C or S;  
X<sub>68</sub> is F or C;  
X<sub>69</sub> is V or D or A;  
X<sub>70</sub> is G or E;  
X<sub>71</sub> is S or F;  
X<sub>72</sub> is T or I;  
X<sub>73</sub> is L or P;  
X<sub>74</sub> is S or L;

X<sub>75</sub> is A or V;  
X<sub>76</sub> is M or I;  
X<sub>77</sub> is M or I;  
X<sub>78</sub> is Y or F;  
X<sub>79</sub> is G or E;  
X<sub>80</sub> is S or N or K;  
X<sub>81</sub> is L or Q;  
X<sub>82</sub> is Y or F or H or C;  
X<sub>83</sub> is S or G or N or D or T;  
X<sub>84</sub> is V or L;  
X<sub>85</sub> is S or N;  
X<sub>86</sub> is I or M or L;  
X<sub>87</sub> is F or C;  
X<sub>88</sub> is C or Y;  
X<sub>89</sub> is W or R;  
X<sub>90</sub> is V or A; and  
X<sub>91</sub> is Y or I or S;

and wherein the variant HBV is selected for by a nucleotide analogue of HBV DNA polymerase.

4. (withdrawn) A variant HBV according to claim 2 wherein the surface antigen on the variant comprises an amino acid substitution, addition and/or deletion or truncation compared to the amino acid sequence set forth below:

M X<sub>1</sub> X<sub>2</sub> X<sub>3</sub> X<sub>4</sub> S G X<sub>5</sub> L X<sub>6</sub> P L X<sub>7</sub> V L Q A X<sub>8</sub> X<sub>9</sub> F X<sub>10</sub> L T X<sub>11</sub> I X<sub>12</sub> X<sub>13</sub> I P X<sub>14</sub> S L X<sub>15</sub> S W W  
T S L N F L G X<sub>16</sub> X<sub>17</sub> X<sub>18</sub> X<sub>19</sub> C X<sub>20</sub> G X<sub>21</sub> N X<sub>22</sub> Q S X<sub>23</sub> X<sub>24</sub> S X<sub>25</sub> H X<sub>26</sub> P X<sub>27</sub> X<sub>28</sub> C P P X<sub>29</sub> C  
X<sub>30</sub> G Y R W M C L X<sub>31</sub> R F I I F L X<sub>32</sub> I L L L C L I F L L V L L D X<sub>33</sub> Q G M L X<sub>34</sub> V C P L  
X<sub>35</sub> P X<sub>36</sub> X<sub>37</sub> X<sub>38</sub> T T S X<sub>39</sub> X<sub>40</sub> X<sub>41</sub> C X<sub>42</sub> T C X<sub>43</sub> X<sub>44</sub> X<sub>45</sub> X<sub>46</sub> Q G X<sub>47</sub> S X<sub>48</sub> X<sub>49</sub> P X<sub>50</sub> X<sub>51</sub> C C  
X<sub>52</sub> K P X<sub>53</sub> X<sub>54</sub> G N C T C I P I P S X<sub>55</sub> W A X<sub>56</sub> X<sub>57</sub> X<sub>58</sub> X<sub>59</sub> L W E X<sub>60</sub> X<sub>61</sub> S X<sub>62</sub> R X<sub>63</sub> S W L  
X<sub>64</sub> L L X<sub>65</sub> X<sub>66</sub> F V Q X<sub>67</sub> X<sub>68</sub> X<sub>69</sub> X<sub>70</sub> L X<sub>71</sub> P X<sub>72</sub> V W X<sub>73</sub> X<sub>74</sub> X<sub>75</sub> I W X<sub>76</sub> X<sub>77</sub> W X<sub>78</sub> W X<sub>79</sub> P  
X<sub>80</sub> X<sub>81</sub> X<sub>82</sub> X<sub>83</sub> I X<sub>84</sub> X<sub>85</sub> P F X<sub>86</sub> P L L P I F X<sub>87</sub> X<sub>88</sub> L X<sub>89</sub> X<sub>90</sub> X<sub>91</sub> I[Formula I];

wherein:

X<sub>1</sub> is E or G or D;

X<sub>2</sub> is N or S or K;

X<sub>3</sub> is I or T;

X<sub>4</sub> is T or A;

X<sub>5</sub> is F or L;

X<sub>6</sub> is G or R;

X<sub>7</sub> is L or R;

X<sub>8</sub> is G or V;

X<sub>9</sub> is F or C;

X<sub>10</sub> is L or S or W;

X<sub>11</sub> is R or K;

X<sub>12</sub> is L or R;

X<sub>13</sub> is T or K;

X<sub>14</sub> is Q or K;

X<sub>15</sub> is D or H;

X<sub>16</sub> is G or E or A;

X<sub>17</sub> is S or A or V or T or L;  
X<sub>18</sub> is P or T;  
X<sub>19</sub> is V or R or T or K or G;  
X<sub>20</sub> is L or P;  
X<sub>21</sub> is Q or L or K;  
X<sub>22</sub> is S or L;  
X<sub>23</sub> is P or Q;  
X<sub>24</sub> is T or I;  
X<sub>25</sub> is N or S;  
X<sub>26</sub> is S or L;  
X<sub>27</sub> is T or I;  
X<sub>28</sub> is S or C;  
X<sub>29</sub> is I or T;  
X<sub>30</sub> is P or A;  
X<sub>31</sub> is R or Q;  
X<sub>32</sub> is F or C;  
X<sub>33</sub> is Y or C;  
X<sub>34</sub> is P or H or S;  
X<sub>35</sub> is I or L;  
X<sub>36</sub> is G or R;  
X<sub>37</sub> is S or T;  
X<sub>38</sub> is T or S;  
X<sub>39</sub> is T or V or A;  
X<sub>40</sub> is G or E or Q;

X<sub>41</sub> is P or A or S;  
X<sub>42</sub> is K or R;  
X<sub>43</sub> is T or M;  
X<sub>44</sub> is T or I or S or A;  
X<sub>45</sub> is P or T or A or I or L;  
X<sub>46</sub> is A or V;  
X<sub>47</sub> is N or T;  
X<sub>48</sub> is M or K or L;  
X<sub>49</sub> is F or Y or I;  
X<sub>50</sub> is S or Y;  
X<sub>51</sub> is C or S;  
X<sub>52</sub> is T or I or S;  
X<sub>53</sub> is T or S;  
X<sub>54</sub> is D or A;  
X<sub>55</sub> is S or T;  
X<sub>56</sub> is F or L;  
X<sub>57</sub> is A or G or V;  
X<sub>58</sub> is K or R or T;  
X<sub>59</sub> is Y or F;  
X<sub>60</sub> is W or G;  
X<sub>61</sub> is A or G;  
X<sub>62</sub> is V or A;  
X<sub>63</sub> is F or L;  
X<sub>64</sub> is S or N;



X<sub>65</sub> is V or A;  
X<sub>66</sub> is P or Q;  
X<sub>67</sub> is W or C or S;  
X<sub>68</sub> is F or C;  
X<sub>69</sub> is V or D or A;  
X<sub>70</sub> is G or E;  
X<sub>71</sub> is S or F;  
X<sub>72</sub> is T or I;  
X<sub>73</sub> is L or P;  
X<sub>74</sub> is S or L;  
X<sub>75</sub> is A or V;  
X<sub>76</sub> is M or I;  
X<sub>77</sub> is M or I;  
X<sub>78</sub> is Y or F;  
X<sub>79</sub> is G or E;  
X<sub>80</sub> is S or N or K;  
X<sub>81</sub> is L or Q;  
X<sub>82</sub> is Y or F or H or C;  
X<sub>83</sub> is S or G or N or D or T;  
X<sub>84</sub> is V or L;  
X<sub>85</sub> is S or N;  
X<sub>86</sub> is I or M or L;  
X<sub>87</sub> is F or C;  
X<sub>88</sub> is C or Y;

X<sub>89</sub> is W or R;

X<sub>90</sub> is V or A; and

X<sub>91</sub> is Y or I or S.

and wherein the variant HBV is selected for following immunological therapy directed against a surface antigen as defined in Formula I.

5. (withdrawn) A variant HBV according to claim 1 comprising a nucleotide sequence having a single or multiple nucleotide substitution, addition and/or deletion or truncation of the nucleotide sequence as set forth in formula III below:

ACN<sub>1</sub>AAACCTN<sub>2</sub>N<sub>3</sub>GGAN<sub>4</sub>GGAAAN<sub>5</sub>TGCACN<sub>6</sub>TGTATTCCCATCC  
CATCN<sub>7</sub>TCN<sub>8</sub>TGGGCTTTCGN<sub>9</sub>AAAN<sub>10</sub>ATN<sub>11</sub>CCTATGGGAGN<sub>12</sub>GGG  
CCTCAGN<sub>13</sub>CCGTTTCTCN<sub>14</sub>TGGCTCAGTTTACTAGTGCCATTT  
GTTTCAGTGGTTCGN<sub>15</sub>AGGGCTTTCCCCCACTGTN<sub>16</sub>TGGCTTTC  
AGN<sub>17</sub>TATATGGATGATGTGGTN<sub>18</sub>TTGGGGGGCCAAGTCTGTAC  
AN<sub>19</sub>CATCN<sub>20</sub>TGAGTCCCTTTN<sub>21</sub>TN<sub>22</sub>CCN<sub>23</sub>CTN<sub>24</sub>TTACCAATTTT  
CTTN<sub>25</sub>TGTCTN<sub>26</sub>TGGGN<sub>27</sub>ATACATT [Formula III];

wherein:

N<sub>1</sub> is A or C;

N<sub>2</sub> is T or A;

N<sub>3</sub> is C or T;

N<sub>4</sub> is C or T;

N<sub>5</sub> is C or T;

N<sub>6</sub> is C or T;  
N<sub>7</sub> is A or G;  
N<sub>8</sub> is T or C;  
N<sub>9</sub> is C or G;  
N<sub>10</sub> is G or A;  
N<sub>11</sub> is T or A;  
N<sub>12</sub> is T or G;  
N<sub>13</sub> is T or C;  
N<sub>14</sub> is C or T;  
N<sub>15</sub> is T or C;  
N<sub>16</sub> is T or C;  
N<sub>17</sub> is T or C;  
N<sub>18</sub> is A or T;  
N<sub>19</sub> is A or G;  
N<sub>20</sub> is T or G;  
N<sub>21</sub> is A or T;  
N<sub>22</sub> is A or G;  
N<sub>23</sub> is T or G;  
N<sub>24</sub> is A or G;  
N<sub>25</sub> is T or C;  
N<sub>26</sub> is T or C; and  
N<sub>27</sub> is T or C.

and wherein the HBV variant has a surface antigen exhibiting an altered immunological profile relative to the surface antigen as defined in Formula I.

6. (withdrawn) An isolated variant Hepatitis B virus surface antigen (HBsAg) or a recombinant form thereof or a derivative or chemical equivalent thereof wherein said HBsAg or its recombinant or derivative form or its chemical equivalent exhibits an altered immunological profile compared to an HBsAg from a reference HBV.

7. (withdrawn) An isolated variant HBsAg or a recombinant or derivative form thereof or a chemical equivalent thereof according to claim 6 wherein the variant HBsAg comprises an amino acid sequence having a single or multiple substitution, addition and/or deletion or truncation of the amino acid sequence set forth below:

M X<sub>1</sub> X<sub>2</sub> X<sub>3</sub> X<sub>4</sub> S G X<sub>5</sub> L X<sub>6</sub> P L X<sub>7</sub> V L Q A X<sub>8</sub> X<sub>9</sub> F X<sub>10</sub> L T X<sub>11</sub> I X<sub>12</sub> X<sub>13</sub> I P X<sub>14</sub> S L X<sub>15</sub> S W W  
T S L N F L G X<sub>16</sub> X<sub>17</sub> X<sub>18</sub> X<sub>19</sub> C X<sub>20</sub> G X<sub>21</sub> N X<sub>22</sub> Q S X<sub>23</sub> X<sub>24</sub> S X<sub>25</sub> H X<sub>26</sub> P X<sub>27</sub> X<sub>28</sub> C P P X<sub>29</sub> C  
X<sub>30</sub> G Y R W M C L X<sub>31</sub> R F I I F L X<sub>32</sub> I L L L C L I F L L V L L D X<sub>33</sub> Q G M L X<sub>34</sub> V C P L  
X<sub>35</sub> P X<sub>36</sub> X<sub>37</sub> X<sub>38</sub> T T S X<sub>39</sub> X<sub>40</sub> X<sub>41</sub> C X<sub>42</sub> T C X<sub>43</sub> X<sub>44</sub> X<sub>45</sub> X<sub>46</sub> Q G X<sub>47</sub> S X<sub>48</sub> X<sub>49</sub> P X<sub>50</sub> X<sub>51</sub> C C  
X<sub>52</sub> K P X<sub>53</sub> X<sub>54</sub> G N C T C I P I P S X<sub>55</sub> W A X<sub>56</sub> X<sub>57</sub> X<sub>58</sub> X<sub>59</sub> L W E X<sub>60</sub> X<sub>61</sub> S X<sub>62</sub> R X<sub>63</sub> S W  
L X<sub>64</sub> L L X<sub>65</sub> X<sub>66</sub> F V Q X<sub>67</sub> X<sub>68</sub> X<sub>69</sub> X<sub>70</sub> L X<sub>71</sub> P X<sub>72</sub> V W X<sub>73</sub> X<sub>74</sub> X<sub>75</sub> I W X<sub>76</sub> X<sub>77</sub> W X<sub>78</sub> W  
X<sub>79</sub> P X<sub>80</sub> X<sub>81</sub> X<sub>82</sub> X<sub>83</sub> I X<sub>84</sub> X<sub>85</sub> P F X<sub>86</sub> P L L P I F X<sub>87</sub> X<sub>88</sub> L X<sub>89</sub> X<sub>90</sub> X<sub>91</sub> I [Formula I];

wherein:

X<sub>1</sub> is E or G or D;

X<sub>2</sub> is N or S or K;

X<sub>3</sub> is I or T;

X<sub>4</sub> is T or A;

X<sub>5</sub> is F or L;

X<sub>6</sub> is G or R;  
X<sub>7</sub> is L or R;  
X<sub>8</sub> is G or V;  
X<sub>9</sub> is F or C;  
X<sub>10</sub> is L or S or W;  
X<sub>11</sub> is R or K;  
X<sub>12</sub> is L or R;  
X<sub>13</sub> is T or K;  
X<sub>14</sub> is Q or K;  
X<sub>15</sub> is D or H;  
X<sub>16</sub> is G or E or A;  
X<sub>17</sub> is S or A or V or T or L;  
X<sub>18</sub> is P or T;  
X<sub>19</sub> is V or R or T or K or G;  
X<sub>20</sub> is L or P;  
X<sub>21</sub> is Q or L or K;  
X<sub>22</sub> is S or L;  
X<sub>23</sub> is P or Q;  
X<sub>24</sub> is T or I;  
X<sub>25</sub> is N or S;  
X<sub>26</sub> is S or L;  
X<sub>27</sub> is T or I;  
X<sub>28</sub> is S or C;  
X<sub>29</sub> is I or T;

X<sub>30</sub> is P or A;  
X<sub>31</sub> is R or Q;  
X<sub>32</sub> is F or C;  
X<sub>33</sub> is Y or C;  
X<sub>34</sub> is P or H or S;  
X<sub>35</sub> is I or L;  
X<sub>36</sub> is G or R;  
X<sub>37</sub> is S or T;  
X<sub>38</sub> is T or S;  
X<sub>39</sub> is T or V or A;  
X<sub>40</sub> is G or E or Q;  
X<sub>41</sub> is P or A or S;  
X<sub>42</sub> is K or R;  
X<sub>43</sub> is T or M;  
X<sub>44</sub> is T or I or S or A;  
X<sub>45</sub> is P or T or A or I or L;  
X<sub>46</sub> is A or V;  
X<sub>47</sub> is N or T;  
X<sub>48</sub> is M or K or L;  
X<sub>49</sub> is F or Y or I;  
X<sub>50</sub> is S or Y;  
X<sub>51</sub> is C or S;  
X<sub>52</sub> is T or I or S;  
X<sub>53</sub> is T or S;

X<sub>54</sub> is D or A;  
X<sub>55</sub> is S or T;  
X<sub>56</sub> is F or L;  
X<sub>57</sub> is A or G or V;  
X<sub>58</sub> is K or R or T;  
X<sub>59</sub> is Y or F;  
X<sub>60</sub> is W or G;  
X<sub>61</sub> is A or G;  
X<sub>62</sub> is V or A;  
X<sub>63</sub> is F or L;  
X<sub>64</sub> is S or N;  
X<sub>65</sub> is V or A;  
X<sub>66</sub> is P or Q;  
X<sub>67</sub> is W or C or S;  
X<sub>68</sub> is F or C;  
X<sub>69</sub> is V or D or A;  
X<sub>70</sub> is G or E;  
X<sub>71</sub> is S or F;  
X<sub>72</sub> is T or I;  
X<sub>73</sub> is L or P;  
X<sub>74</sub> is S or L;  
X<sub>75</sub> is A or V;  
X<sub>76</sub> is M or I';  
X<sub>77</sub> is M or I;

X<sub>78</sub> is Y or F;  
X<sub>79</sub> is G or E;  
X<sub>80</sub> is S or N or K;  
X<sub>81</sub> is L or Q;  
X<sub>82</sub> is Y or F or H or C;  
X<sub>83</sub> is S or G or N or D or T;  
X<sub>84</sub> is V or L;  
X<sub>85</sub> is S or N;  
X<sub>86</sub> is I or M or L;  
X<sub>87</sub> is F or C;  
X<sub>88</sub> is C or Y;  
X<sub>89</sub> is W or R;  
X<sub>90</sub> is V or A; and  
X<sub>91</sub> is Y or I or S;

and wherein a neutralizing antibody directed to a reference HBV exhibits no or reduced neutralizing activity to an HBV carrying said variant HBsAg.

8. (withdrawn) An isolated variant HBsAg according to claim 7 encoded by a nucleotide sequence having a single or multiple nucleotide substitution, addition and/or deletion or truncation relative to the nucleotide sequence set forth below:

ACN<sub>1</sub>AAACCTN<sub>2</sub>N<sub>3</sub>GGAN<sub>4</sub>GGAAAN<sub>5</sub>TGCACN<sub>6</sub>TGTATTCCCATCC  
CATCN<sub>7</sub>TCN<sub>8</sub>TGGGCTTTCGN<sub>9</sub>AAN<sub>10</sub>ATN<sub>11</sub>CCTATGGGAGN<sub>12</sub>GGG  
CCTCAGN<sub>13</sub>CCGTTTCTCN<sub>14</sub>TGGCTCAGTTTACTAGTGCCATTT



G T T C A G T G G T T C G N<sub>15</sub> A G G G C T T T C C C C C A C T G T N<sub>16</sub> T G G C T T T C  
A G N<sub>17</sub> T A T A T G G A T G A T G T G G T N<sub>18</sub> T T G G G G G C C A A G T C T G T A C  
A N<sub>19</sub> C A T C N<sub>20</sub> T G A G T C C C T T T N<sub>21</sub> T N<sub>22</sub> C C N<sub>23</sub> C T N<sub>24</sub> T T A C C A A T T T T  
C T T N<sub>25</sub> T G T C T N<sub>26</sub> T G G G N<sub>27</sub> A T A C A T T [FORMULA III];

wherein:

- N<sub>1</sub> is A or C;
- N<sub>2</sub> is T or A;
- N<sub>3</sub> is C or T;
- N<sub>4</sub> is C or T;
- N<sub>5</sub> is C or T;
- N<sub>6</sub> is C or T;
- N<sub>7</sub> is A or G;
- N<sub>8</sub> is T or C;
- N<sub>9</sub> is C or G;
- N<sub>10</sub> is G or A;
- N<sub>11</sub> is T or A;
- N<sub>12</sub> is T or G;
- N<sub>13</sub> is T or C;
- N<sub>14</sub> is C or T;
- N<sub>15</sub> is T or C;
- N<sub>16</sub> is T or C;
- N<sub>17</sub> is T or C;
- N<sub>18</sub> is A or T;

N<sub>19</sub> is A or G;  
N<sub>20</sub> is T or G;  
N<sub>21</sub> is A or T;  
N<sub>22</sub> is A or G;  
N<sub>23</sub> is T or G;  
N<sub>24</sub> is A or G;  
N<sub>25</sub> is T or C;  
N<sub>26</sub> is T or C; and  
N<sub>27</sub> is T or C.

9. (withdrawn) A variant HBV or an isolated HBsAg from said variant HBV wherein said variant HBV comprises an HBsAg having a single or multiple amino acid substitution, addition and/or deletion or truncation relative to the HBsAg on a reference HBV and whereas the HBsAg variant is defined by a single or multiple amino acid substitution, addition and/or truncation to the catalytic region of HBV DNA polymerase as defined below:

S Z<sub>1</sub> L S W L S L D V S A A F Y H Z<sub>2</sub> P L H P A A M P H L L Z<sub>3</sub> G S S G L Z<sub>4</sub> R Y V A R L S  
S Z<sub>5</sub> S Z<sub>6</sub> Z<sub>7</sub> X N Z<sub>8</sub> Q Z<sub>9</sub> Z<sub>10</sub> X X X Z<sub>11</sub> L H Z<sub>12</sub> Z<sub>13</sub> C S R Z<sub>14</sub> L Y V S L Z<sub>15</sub> L L Y Z<sub>16</sub> T Z<sub>17</sub> G  
Z<sub>18</sub> K L H L Z<sub>19</sub> Z<sub>20</sub> H P I Z<sub>21</sub> L G F R K Z<sub>22</sub> P M G Z<sub>23</sub> G L S P F L L A Q F T S A I Z<sub>24</sub> Z<sub>25</sub> Z<sub>26</sub>  
Z<sub>27</sub> Z<sub>28</sub> R A F Z<sub>29</sub> H C Z<sub>30</sub> Z<sub>31</sub> F Z<sub>32</sub> Y M \* D D Z<sub>33</sub> V L G A Z<sub>34</sub> Z<sub>35</sub> Z<sub>36</sub> Z<sub>37</sub> H Z<sub>38</sub> E Z<sub>39</sub> L Z<sub>40</sub> Z<sub>41</sub>  
Z<sub>42</sub> Z<sub>43</sub> Z<sub>44</sub> Z<sub>45</sub> Z<sub>46</sub> L L Z<sub>47</sub> Z<sub>48</sub> G I H L N P Z<sub>49</sub> K T K R W G Y S L N F M G Y Z<sub>50</sub> I G [Formula  
II];

wherein:

X is any amino acid;  
Z<sub>1</sub> is N or D;

Z<sub>2</sub> is I or P;  
Z<sub>3</sub> is I or V;  
Z<sub>4</sub> is S or D;  
Z<sub>5</sub> is T or N;  
Z<sub>6</sub> is R or N;  
Z<sub>7</sub> is N or I;  
Z<sub>8</sub> is N or Y or H;  
Z<sub>9</sub> is H or Y;  
Z<sub>10</sub> is G or R;  
Z<sub>11</sub> is D or N;  
Z<sub>12</sub> is D or N;  
Z<sub>13</sub> is S or Y;  
Z<sub>14</sub> is N or Q;  
Z<sub>15</sub> is L or M;  
Z<sub>16</sub> is K or Q;  
Z<sub>17</sub> is Y or F;  
Z<sub>18</sub> is R or W;  
Z<sub>19</sub> is Y or L;  
Z<sub>20</sub> is S or A;  
Z<sub>21</sub> is I or V;  
Z<sub>22</sub> is I or L;  
Z<sub>23</sub> is V or G;  
Z<sub>24</sub> is C or L;  
Z<sub>25</sub> is A or S;

Z<sub>26</sub> is V or M;  
Z<sub>27</sub> is V or T;  
Z<sub>28</sub> is R or C;  
Z<sub>29</sub> is F or P;  
Z<sub>30</sub> is L or V;  
Z<sub>31</sub> is A or V;  
Z<sub>32</sub> is S or A;  
Z<sub>33</sub> is V or L or M;  
Z<sub>34</sub> is K or R;  
Z<sub>35</sub> is S or T;  
Z<sub>36</sub> is V or G;  
Z<sub>37</sub> is Q or E;  
Z<sub>38</sub> is L or S or R;  
Z<sub>39</sub> is S or F;  
Z<sub>40</sub> is F or Y;  
Z<sub>41</sub> is T or A;  
Z<sub>42</sub> is A or S;  
Z<sub>43</sub> is V or I;  
Z<sub>44</sub> is T or C;  
Z<sub>45</sub> is N or S;  
Z<sub>46</sub> is F or V;  
Z<sub>47</sub> is S or D;  
Z<sub>48</sub> is L or V;  
Z<sub>49</sub> is N or Q;

Z<sub>50</sub> is V or I; and

M\* is amino acid 550.

10. (currently amended) A variant ~~HBV or variant HBsAg from said variant HBV~~ comprising a the mutation selected from the list consisting of G112R, T123P, Y/F134S, D144E, G145R, A157D, E164D, F170L, M195I, W196L, S196W, W196STOP, M198I, W199S, S204T and S210R wherein "STOP" means a stop codon.

11. (withdrawn) A variant HBV or variant HBsAg from said variant HBV comprising a mutation selected from the list consisting of:  
D144E, G145R, A157D, E164D, M195I, W196L, S196W, W196STOP, M198I, W199S and S210R wherein "STOP" means a codon.

12. (withdrawn) A variant HBV or variant HBsAg from said variant HBV comprising a mutation selected from the list consisting of:  
Q476, N480G, N485K, K495R, R499O, G499E, W499Q, F512L, I515L, V519L, L526M, M550V, M550I, V553I and S565P.

13. (currently amended) A composition comprising ~~a variant HBV or the~~ variant HBsAg according to ~~any one of claims 1 to 12~~ claim 10 and one or more pharmaceutically acceptable carriers and/or diluents.

14. (canceled).

15. (withdrawn) A method for the treatment or prophylaxis of HBV infection said method comprising administering to a subject an amount of a variant HBV or variant HBsAg according to any one of claims 1 to 12, said amount being effective to induce an immune response to said variant HBV.

16. (canceled).

17. (withdrawn) Use of a variant HBV or an HBsAg from said variant HBV in screening for an agent useful in the treatment or prophylaxis of infection by said variant HBV.